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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,373	03/24/2004	Satoshi Arakawa	Q80492	3963

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SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

ROSENBERGER, FREDERICK F

ART UNIT PAPER NUMBER

2884

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/807,373

Applicant(s)

ARAKAWA, SATOSHI

Examiner

Frederick F. Rosenberger

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 8 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's reply, filed 4 August 2006, has been received and entered.

Accordingly, claims 1 and 2 have been amended. No claims have been cancelled.

Claims 3-8 have been added. Thus, claims 1-8 are currently pending in this application.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinstein et al. (US Patent # 6,626,569) in view of Jang et al. (US Patent # 5,892,840).

Reinstein et al. disclose a quality assurance system for use with a medical linear accelerator comprising:

A radiation image reading means in the form of digitizer **60** (Figure 1) for reading the image from an exposed X-ray film into a computer **20** (column 7, lines 5-16);

And a relative position obtaining means, in the form of image processing software in computer **20**, which compares the markings in the image to determine the alignment of a positioning light field and corresponding X-ray

radiation, among other device parameters (column 2, line 54 – column 3, line 9; column 6, lines 24-43; column 8, lines 4-27; column 10, line 3 – column 11, line 16).

Reinstein et al. are silent with regards to the radiation image reading means reading out a radiation image from a stimuable phosphor sheet. Instead, Reinstein et al. choose to work with radiographic film or an electronic portal imaging device (column 6, lines 10-15).

However, the use of stimuable phosphors is well known in the art. For example, Jang et al. disclose the use of a storage phosphor panels (i.e. stimuable phosphor panels) in place of radiographic film in determining the X-ray beam parameters of a radiographic system. Jang et al. points out that the use of stimuable phosphors is preferred over radiographic film because of a wider exposure latitude and the opportunity for electronic processing, storage, and transmission of images. Thus, it would have been obvious for a person having ordinary skill in the art at the time the invention was made to employ a radiation image reading means for reading out the image from a stimuable phosphor instead of a radiographic film so as to take advantage of the wider exposure latitude and electronic processing, storage and transmission opportunities afforded by a stimuable phosphor, as taught by Jang et al.

The combination of Reinstein et al. and Jang et al. disclose a quality control system for an irradiation apparatus comprising both a radiation image reading means capable of reading out an image from a stimuable phosphor and a relative position obtaining means for obtaining a relation between a position check light field and the

irradiation field through image analysis. The limitations associated with the irradiation processing steps of the phosphor panel do not affect the structure of the radiation image reading means or the relative position obtaining means. "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining the patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." In re Young, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). See MPEP § 2115.

#### ***Allowable Subject Matter***

4. Claims 7 and 8 are allowed.
5. Claims 3-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: With regards to claims 3 and 5, the prior art fails to teach or reasonably suggest the radiation image including a first image of the position check radiation and a second image of the position check light wherein the relative position obtaining means obtains the relation between irradiating positions based on the first and second images.

Instead, Reinstein et al. discloses that the radiation image includes only an image of the position check radiation, which is used to determine the relation between the position check light and position check radiation.

With regards to claims 4 and 6, the prior art fails to teach or reasonably suggest the radiation image including a first image of the position check radiation and a second image of the position check light wherein the relative position obtaining means compares positions of the first and second images in determining the relation between irradiating positions. Similarly, with regards to claim 7, the prior art fails to teach or reasonably suggest a quality control method of reading a first image of position check radiation and a second image of position check light from a stimuable phosphor panel and comparing the positions of the images to determine a relation between the irradiating positions. Instead, Reinstein et al. discloses that the radiation image includes only an image of the position check radiation, which is used to determine the relation between the position check light and position check radiation. Claim 8 would be allowable by virtue of its dependency on claim 7.

### ***Response to Arguments***

7. Applicant's arguments filed 4 August 2006 have been fully considered but they are not persuasive.

Applicant contends that there is nothing in Reinstein that teaches or suggests the image processing software obtains the relation between the irradiating position of the radiation and the irradiating position of the light on the basis of the radiation image read.

Art Unit: 2884

As pointed out in column 10, line 63 through column 11, line 16 of Reinstein, the coincidence (i.e. relation) of the radiation field edge (i.e. position check radiation) is compared with that of the light field edge (i.e. position check light) in order to determine a relation between the two fields. This relation is based on a comparison of the markings in the image generated by irradiation with position check radiation with an alignment of the phantom in the position check light field prior to exposure. Thus, the examiner maintains that Reinstein does disclose a relative position obtaining means as recited in the claims.

Applicant further notes that Reinstein does not have both of the beams directly recorded on the radiographic film (page 7, 2<sup>nd</sup> paragraph of the response). In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the light beam recorded on the image storing means) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***


8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2884

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick F. Rosenberger whose telephone number is 571-272-6107. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

  
DAVID PORTA  
SUPERVISOR, PATENT EXAMINER  
TECHNICAL



Art Unit: 2884

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frederick F. Rosenberger  
Patent Examiner  
GAU 2884